

Appl. No. 10/820,575  
Office Action dated April 21, 2005  
Amdt dated: August 18, 2005

In the Claims

Claims 1-18 are canceled.

19. [Original] An apparatus comprising:  
a container configured to provide a subject material in a substantially static state;  
and  
at least one sensor provided at a predefined position relative to the container to monitor the turbidity of the subject material at a desired vertical position of the container.

20. [Original] The apparatus according to claim 19 wherein the at least one sensor comprises a plurality of sensors provided at different predefined positions relative to the container to monitor the turbidity of the subject material at a plurality of desired vertical positions of the container.

21. [Original] The apparatus according to claim 19 wherein the at least one sensor comprises:  
a source configured to emit electromagnetic energy towards the container; and  
a receiver configured to receive at least some of the electromagnetic energy.

Claims 22-48 are canceled.

Appl. No. 10/820,576  
Office Action dated April 21, 2005  
Amdt dated: August 18, 2005

49. [Original] A turbidity monitoring method comprising:  
providing a container;  
providing subject material in a substantially static condition within the container;  
monitoring the turbidity of the subject material at a predefined vertical position within  
the container; and  
generating a signal indicative of the turbidity of the subject material after the  
monitoring.

50. [Original] The method according to claim 49 further comprising monitoring  
the turbidity of the subject material at another predefined vertical position within the  
container.

51. [Original] The method according to claim 49 wherein the monitoring  
comprises:  
emitting electromagnetic energy towards the subject material; and  
receiving at least some of the electromagnetic energy.

52. [Original] The method according to claim 49 further comprising rotating the  
subject material during the monitoring.

Claims 53-58 are canceled.

Appl. No. 10/820,575  
Office Action dated April 21, 2005  
Amdt dated: August 18, 2005

59. [Previously Presented] The method according to claim 49 wherein the monitoring comprises monitoring the turbidity of the subject material provided in the substantially static condition.

60. [Previously Presented] The apparatus according to claim 19 wherein the at least one sensor monitors the turbidity of the subject material in the substantially static state.

61. [Previously Presented] The method according to claim 49 wherein the monitoring comprises monitoring the turbidity of the subject material provided in a static condition.

62. [Previously Presented] The apparatus according to claim 19 wherein the container is configured to provide the subject material in the substantially static state.

63. [Previously Presented] The apparatus according to claim 19 further comprising a process chamber configured to receive and process a semiconductor workpiece using the subject material.

Appl. No. 10/820,575  
Office Action dated April 21, 2005  
Amdt dated: August 18, 2005

64. [Previously Presented] A sensor comprising:  
a source configured to emit electromagnetic energy towards a subject material;  
an initial receiver configured to receive at least some of the electromagnetic energy,  
the initial receiver being configured to generate a signal indicative of the turbidity of the  
subject material and responsive to the received electromagnetic energy; and  
a housing configured to align the source and initial receiver with respect to the  
subject material;  
wherein the housing is configured to attach to a supply connection containing the  
subject material and detach from the supply connection without disruption of the flow of  
subject material within the supply connection.

65. [New] The apparatus according to claim 19 wherein the subject material  
comprises a fluid and particulate matter within the fluid, and wherein the at least one  
sensor is configured to monitor settling of the particulate matter within the fluid.

66. [New] The apparatus according to claim 19 wherein the subject material  
comprises a fluid and particulate matter within the fluid, and wherein the at least one  
sensor is configured to monitor a precipitation rate of the particulate matter within the fluid.

Appl. No. 10/820,575  
Office Action dated April 21, 2005  
Amdt dated: August 18, 2005

67. [New] The apparatus according to claim 19 further comprising a computer coupled with the at least one sensor and configured to access information regarding the turbidity of the subject material.

68. [New] The apparatus according to claim 19 wherein the subject material comprises a fluid and particulate matter within the fluid, and wherein the at least one sensor is configured to monitor turbidity including monitoring all particulate matter suspended in the fluid at the desired vertical position of the container.

69. [New] The apparatus according to claim 19 wherein the container containing the subject material is configured to rotate about an axis during the monitoring of turbidity by the at least one sensor.

70. [New] The method according to claim 49 wherein the subject material comprises a fluid and particulate matter within the fluid, and wherein the monitoring comprises monitoring settling of the particulate matter within the fluid.

71. [New] The method according to claim 49 wherein the subject material comprises a fluid and particulate matter within the fluid, and wherein the monitoring comprises monitoring a precipitation rate of the particulate matter within the fluid.

Appl. No. 10/820,575  
Office Action dated April 21, 2005  
Amdt dated: August 18, 2005

72. [New] The method according to claim 49 further comprising, using a computer, providing information regarding the turbidity of the subject material using the signal.

73. [New] The method according to claim 49 wherein the subject material comprises a fluid and particulate matter within the fluid, and wherein the monitoring comprises monitoring turbidity with respect to all particulate matter suspended in the fluid at the predefined vertical position within the container.

74. [New] The method according to claim 49 further comprising rotating the container comprising the subject material about an axis during the monitoring.